

## ABSTRACT OF THE DISCLOSURE

A gait detection apparatus includes a microphone for picking up low-frequency-band sounds which are transmitted through the body of a pedestrian while walking and an analyzer for performing analysis. Accordingly, the gait of the pedestrian is detected. It is also possible to distinguish the gait pattern on the basis of the stance-phase time of a foot sole, the signal intensity, etc. The gait detection apparatus can accurately estimate the step length on the basis of a detected gait cycle, the height of the pedestrian, and signals detected during walking. On the basis of low-frequency-region sounds picked up by the microphone while the pedestrian is walking, the pedestrian can be identified.